SEEDS

for the

NURSERYMAN

AND

FORESTER

1954-1955

F. W. SCHUMACHER

HORTICULTURIST

SANDWICH, MASS.

TERMS

Deliveries are subject to yield of crops and safe arrival of consignments.

. It is not possible to have all items listed available at all times. A number of perishable seeds cannot be stored successfully and must be ordered in season. All seeds are offered subject to crop failures or short supplies.

Seeds are sold without warranty, expressed or implied as to description and productiveness. Goods should be carefully inspected upon arrival and claims for conditions made at once. We cannot consider claims after seeds have been stored or planted.

All shipments travel at buyer's risk and claims for damages in transit must be taken up with carriers.

CAUTION — While it is true that plants grown from seed of horticultural varieties often yield superior plant material in comparision to that grown from nondescript seed, we wish to emphasize that seeds of such varieties or hybrids, with few exceptions, cannot be expected to come true to name. They are offered here for the convenience of competent plantsmen, for research and breeding work only.

CUSTOMERS OTHER THAN PROFESSIONALS—Please note that their orders for pound lots will be handled in line with all others. Orders for small quantities of assorted items must wait their turn to be filled after arrival of respective items from sources. We suggest that such orders be placed with us prior to March 1st. During the busy spring and fall shipping seasons orders for small amounts of seeds cannot be filled promptly. Please confine correspondence concerning small orders to the most necessary and attach a stamped return envelope if your inquiry does not concern an order. The right is reserved to return orders received in excess of our facilities.

PRICES—subject to change without notice, are f.o.b. Sandwich, Mass. PAYMENT—for customers of approved credit upon receipt of invoice. A cash discount of 3% is allowed on all orders amounting to \$10.00 or more. For orders or shipments requested for less than \$5.00, please remit \$.50 extra for handling. Please include postage charges in your remittance together with charges for packing, 5% for all items in pound lots or over. Packing is charged at cost.

ORDERING — We request that written orders be a separate part of any correspondance and clearly show amount and price of each item listed. Quantities smaller than listed cannot be supplied.

CERTIFICATION — All bulk lots of forest seeds received from abroad are certified as to origin as a matter of course. Special certificates will be furnished upon request.

ABBREVIATION — N. E. stands for New England seed, a sign of hardiness; d.b. for dried berries; asterisk (*) denotes new or insufficiently known plants of merit.

WE ARE IN THE MARKET FOR TREE AND SHRUB SEEDS OF ALL KINDS.

WE ARE OPERATING NOW FROM NEWLY BUILT PREMISES

IN

SANDWICH, MASS.
Telephone SAGAMORE 659

ABIES alba (pectinata)		¼ lb.	lb.
amabilis	.45 .85	.80	2.00 6.50
balsamea		2.35	6.0
cephalonica	.80	2.25 .85	2.5
cilicica	.45		
concolor, California	.45	.85	2.50
cancelor Colorado	.65	1.75	5.0
concolor, Colorado	.65	1.75	5.0
	.50	1.10	3.0
grandishomolepis	.85	2.35	6.5
lasiocarpa	.60	1.65	4.5
nordmanniana Northorn Furana	.85	2.35	6.5 4.0
nordmanniana, Northern Europe	.60	1.40	
nordmanniana, South Central Europe	.50	1.10	3.0
pinsapo		.85	2.5
pinsapo glauca	1 00	1.10	3.0
procera (nobilis)	1.00	2.75	7.5
veitchi	.65	1.70	4.7
ACACIA armata	1.10	3.00	4 =
baileyana	.60	1.65	4.5
cultriformis	.65	1.75	5.0
cyanophylla	.50	.85	2.5
cyclops	.50	1.10	3.0
decurrens	.50	1.10	3.0
decurrens dealbata	.50	1.00	2.7
decurrens dealbata, fast growing cultural selection	.65	1.75	5.0
decurrens mollis (mollissima)	.40	.85	2.2
farnesiana	.50	1.00	2.7
longifolia	.60	1.65	4.5
longifolia floribunda	.55	1.40	4.0
melanoxylon	.50	1.10	3.0
pendula250 seeds 1.25 — 1,000 seeds, 3.00		0=	
pycnantha	.50	.85	2.5
retinodes floribunda	.50	1.10	3.0
saligna		.55	1.5
ACANTHOPANAX spinosus	00	1.75	5.0
ACER argutum	.60	1.65	4.5
campestre	90	.45	.7
carpinifolium	.80	2.25	6.0 4.0
crataegifolium	.55	1.40	4.0
davidi	1.25	$\frac{3.50}{1.25}$	3.5
diabolicum	.50 .50		
√ginnala	1.00	1.10 3.00	3.0
griseum	.55	1.40	4.0
japonicum	.50		3.0
macrophyllum	.50	1.10	
negundo	co	.45	.7
nikoense	.60	1.65	4.5
palmatum, small seeded	.60	1.65	4.5
palmatum, from garden specimens	.60	1.65	
palmatum atropurpureum	.95	2.50	7.0
palmatum atropurpureum dissectum	2.00	5.40	
pennsylvanicum	.50	1.00	2.8
platanoides		.50	1.2
rubrum		.85	2.5
rufinerve	.50	1.25	3.5

r. w. schumacher	WIII W	1011, 1	1000
	oz.	1/4 lb.	lb.
ACER (continued)			
spicatum	.50	1.20	3.25
ADENANTHERA pavonina	.70	2.00	
AILANTHUS altissima (glandulosa)			.75
AKEBIA lobata		1.10	3.00
quinata	.50	1.10	3.00
ALBIZZIA julibrissin		.50	1.00
julibrissin rosea, a hardy strain (Zone 5)	.50	1.15	3.25
lophanta	.50	1.00	2.75
ALNUS cordata	.50	.85	2.50
glutinosa		.55	1.50
incana		.65	1.75
japonica	.50	1.10	3.00
rugosa, N. E.	.90	2.50	
AMELANCHIER asiatica, clean	.65	1.75	5.00
canadensis, d.b	.65	1.75	5.00
grandiflora, d.b	1.00	2.20	6.00
humilis, d.b.	1.00	2.20	6.00
laevis, d.b	1.00	2.20	6.00
stolonifera, d.b.	1.00	2.20	6.00
AMPELOPSIS (see also Parthenocissus) aconitifolia, N.E., d.b.	.75	~.~0	0.00
brevipedunculata (heterophylla) N. E., d.b	.65	1.75	
AMORPHA canescens	.50	1.25	3.50
fruticosa	.00	.50	1.00
microphylla (nana)		.50	1.25
ARALIA chinensis		2.25	6.25
		2.20	0.~
sieboldi, see Fatsia spinosa, d.b	.50	1.10	3.00
ARBUTUS menziesi, d.b	.50	1.25	3.50
unedo, clean	1.00	2.50	5.50
ARCTOSTAPHYLOS glauca	.45	1.00	2.75
manzanita, d.b.	.50	.80	2.25
urva ursi, clean	.55	1.40	4.00
ARDESIA crenulata	.65	1.75	5.00
	.80	2.25	6.00
japonica	.00	4.43	0.00
ARECASTRUM romanzoffianum (Cocos plumosa)			
250 seeds 1.50 — 1,000 seeds 5.00		00	2.50
ARONIA arbutifolia, d.b.		.90 1.10	3.00
arbutifolia brilliantissima, d.b			1.75
melanocarpa, d.b.		.65	2.50
prunifolia (atropurpurea), d.b	45	.85	
ASIMINA triloba	.45	.90	2.5
AZALEA albrechti			
arborescens, N. E			
atlantica			
calendulacea, N. E			
canescens			
indica (macrantha)	0.00		
japonica, imported seed, Japan	3.00		
japonica, yellow flowered, Japan1.00 ¼ oz.	3.00		
japonica, a new England garden strain, yellow and			
orange colors			
kaempferi, (see under obtusa)			
linearifolia macrosepala, N. E			
maxwelli, N. E			

AZATRA (U)	oz.	1/4 lb.	lb.
AZALEA (continued)			
mollis, domestic seed, yellow and orange shades			
mollis, imported	2 00		
mucronata (ledifolia alba) white, N. E.	3.00		
.50 pkt., 1.00 $\frac{1}{32}$ oz.			
mucronulata, N. E			
nudiflora			
obtusa, Japan, shades of red and rose70 $\frac{1}{16}$ oz.			
obtusa japonica (kiusiana), domestic, N. E			
obtusa japonica (kiusiana) imported			
obtusa kaempferi, home grown, N.E1.00 1/16 oz., 3.50 1/4 oz. obtusa kaempferi, low spreading type, red flowers			
1.25 $\frac{1}{32}$ oz.			
obtusa kaempferi, imported seed, Japan			
.45 $\frac{1}{16}$ oz., 1.00 $\frac{1}{4}$ oz.			
obtusa kaempferi mikawana50 pkt.			
pennsylvanica			
pentaphylla (quinquefolia rosea)70 $\frac{1}{16}$ oz., 2.10 $\frac{1}{4}$ oz.			
pontica			
*poukhanensis, N. E			
reticulata (dilatata)			
rosea, N. E			
schlippenbachi, Korean strain, N. E75 1/8 oz., 1.75 1/4 oz.			
vaseyi, N. E			
(See listing of Hybrid varieties on pages 23-24.	.)		
BERBERIS thunbergi, clean	.60	1.65	4.50
thunbergi atropurpurea, d.b	1.00	2.75	7.50
thunbergi pluriflora, from profusely fruiting selection, d.b.	1.00		
BETULA japonica	.50	1.20	3.25
lenta	.50	1.40	4.00
lutea	.50	1.40	4.00
lutea, cleanpapyrifera	1.00 .50	$2.70 \\ 1.40$	7.50 4.00
papyrifera, clean	.85	2.50	7.00
papyrifera minor	.90	2.25	1.00
pendula (alba), clean	.45	.80	2.25
pendula (alba), seed from northern limit, clean	.50	1.10	3.00
populifolia	.50	1.40	4.00
pubescens (odorata)	1 00	.70	2.00
pumila	1.00	2.50	
BRACHYCHITON acerifolium		1.40	4.00
discolor		1.65	4.50 3.25
populneum	1.00	1.20	
BUDDLEIA davidi (variabilis)	1.00 .60	2.75 1.50	7.50 4.25
davidi, from new garden forms	2.00	1.50	1.40
davidi, white	2.00		
japonica	2.00		
BUTIA capitata (Cocos australis)250 seeds 1.50—1,000 seeds 4.50			
BUXUS microphylla koreana, N. E.			
the true many records and the	2.00	00	9 50
sempervirens	.50	.90	2.50

	07	1/4 lb.	lb.
CALLICARPA dichotoma		4.50	
giraldiana	1	2.00	
CALLUNA vulgaris, clean	1.00		
CALLUNA VUIGARIS, Clean	.50	1.00	2.75
CALYCANTHUS floridus	.50	1.25	3.50
occidentalis	.50	.70	2.00
CAMELLIA japonica, seed from Japan	.50		2.50
japonica, from garden specimens	.30	.50	2.50
japonica, seed from named double varieties100 seeds 2.50	90	2.25	6.00
reticulata	.80		
sasanqua		.80	2.25 3.00
CAMPSIS (Bignonia) grandiflora	.50	1.10	
radicans	.50	1.10	3.00
CAPPARIS inermis		1.10	3.00
spinosa		1.10	3.00
CARAGANA arborescens	.50	1.10	3.00
CARPENTERIA californica			
CARPINUS betulus, clean		.50	1.25
caroliniana, clean	.50	1.10	3.00
cordata	.75	2.25	6.00
japonica	.65	1.75	5.00
tschonoski	.85	2.35	6.50
CASSIA artemisioides	1.50	4.00	
tomentosa	1.10	3.00	
CASUARINA cunninghamiana, domestic seed	1.00	2.75	7.50
equisetifolia, domestic seed	.80	2.25	6.00
CATALPA bignonioides		.40	1.00
ovata		.55	1.50
speciosa		1.10	3.00
CEANOTHUS americanus	.80	2.25	6.00
arboreus	1.50		
arboreus hybrids	1.50		
cyaneus	1.65		
griseus horizontalis	1.25		
integerrimus	1.25		
megacarpus	1.50		
olivaceus tomentosus	2.50		
purpureus	2.50		
purpureus	1.50		
spinosus	1.25		
thyrsiflorus	1.50		
verrucosus	1.00	1.20	3.25
CEDRUS atlantica		1.25	3.50
atlantica argentea		1.30	3.75
atlantica glauca not suppliable for export		1.00	2.75
deodara			3.25
libani		1.20	
CELASTRUS orbiculatus, clean	.50	1.10	3.00
scandens, clean	.65	1.85	5.25
seandens, d.b		.90	2.50
CELTIS mississippiensis (laevigata), d.b		.65	1.75
occidentalis, d.b		.55	1.50
CEPHALANTHUS occidentalis, clean		.65	1.75
CEPHALOTAXUS drupacea		.45	1.25
fortuni		.55	1.50
CERATONIA siliqua		.45	1.25
CERCIDIPHYLLUM *japonicum	2.00	5.00	
CERCIS canadensis Northern seed	.50	1.15	3.25

	Juliu II	1011, 1	11455
CERCIS (continued)	oz.	¼ lb.	lb.
canadensis, Southern seed	.50	1.00	2.75
chinensis	.60	1.55	4.50
occidentalis	.55	1.25	3.50
siliquastrum	,,,,	.35	1.00
siliquastrum alba	.45	.80	2.2
CHAENOMELES lagenaria (Cydonia japonica)	.55	1.40	4.00
lagenaria pygmaea	.55	1.25	3.5
CHAMAECYPARIS lawsoniana	.00	.65	1.7
lawsoniana, from garden forms, northern grown seed	50	1.05	2.8
lawsoniana allumi, blue, columnar shaped form	.50	1.10	3.0
lawsoniana argentea	.50	.90	2.5
lawsoniana aurea	.50	.90	2.5
lawsoniana pendula glauca	.50	1.00	2.7
lawsoniana pyramidalis	.50	1.00	2.7
lawsoniana Triumph de Boskoop, choice blue form	.50	1.10	3.0
*nootkatensis	.75	2.15	6.0
obtusa	.55	1.25	3.5
obtusa aurea	.65	1.75	5.0
obtusa, garden forms	.65	1.75	5.0
pisifera	.55	1.40	4.0
pisifera filifera	.60	1.50	4.2
pisifera plumosa	.60	1.55	4.5
pisifera squarrosa	.80	1.85	5.2
thyoides	2.50		
CHAMAEROPS humilis		.45	1.0
CHILOPSIS linearis	.80	2.35	6.5
CHIMONANTHUS (Meratia) praecox		.80	2.2
CHIONANTHUS retusus		2.25	6.0
virginicus, clean	.50	1.10	3.0
CINNAMOMUM camphora	.00	.65	1.8
CLADRASTIS lutea	.50	1.30	3.7
		1.50	3.1
CLEMATIS alpina	2.00	1 75	
florida	.65	1.75	
paniculata, imported	.55	1.65	4.5
patens	.65	1.75	
viticella		.55	1.5
CLERODENRON trichotomum	.50	.95	2.5
CLETHRA acuminata d.b	1.00		
alnifolia, N. E. d.b.	.55	1.25	3.5
barbinervis, clean	.80	2.35	
fargesi, d.b			
tomentosa, d.b	1.00		
COCCULUS carolinus		.55	1.5
COLUTEA arborescens		.55	1.5
CORDYLINE (Dracaena) indivisa, clean	.60	1.50	4.2
CORNUS alba	.60	1.55	4.5
alternifolia, N. E., d.b.	.50	1.10	3.0
amomum, clean.	.50	1.25	3.5
canadensis, N. E. d.b.	.70	1.85	5.5
		.70	2.0
capitata	25		3.7
controversa	.55	1.35	
florida, Southern, clean	.50	.95	2.50
florida, climatic Zone 6, clean	.50	.95	2.5
florida, N. E., Zone 4 or 5, clean	.50	1.25	3.7
kousa, clean	.55	1.25	3.5

r. w. senemaener		, , ,	
CORNUS (continued)	oz.	1/4 lb.	
mas, clean		.60	1.5
nuttalli, d.b.	.50		3.5
racemosa (paniculata), clean	.50	1.10	3.0
racemosa (paniculata) d.b		.60	1.5
rugosa, d.b	.50	1.10	3.0
sanguinea, clean		.50	1.0
stolonifera, d.b.		.70	1.7
CORONILLA emerus	.60	1.50	
CORYLOPSIS sinensis, N. E65 ½ oz.	2.00		
spicata	1.75	5.00	
CORYLUS americana	2	.65	1.6
avellana			.7
COTINUS coggygria (Rhus cotinus)		.65	1.6
COTONEASTER acutifolia, clean	1.25		10.0
	1.50	3.50	10.0
adpressa praecox, d.b	.75	2.25	6.0
apiculata, d.b		1.75	
bullata, clean	.65		5.0
bullata floribunda, d.b	.70	2.00	~ 0
buxifolia, clean	.65	1.75	5.0
dielsiana, clean	.75	2.25	6.0
dielsiana elegans, d.b65 ¼ oz.	1.50		
*dielsiana major, clean	1.00	3.00	
divaricata, clean	1.00	2.75	7.5
francheti, clean	.60	1.50	4.2
francheti cinerascens, d.b	.75		
gracilis, d.b., N. E	1.25		
horizontalis, clean	.60	1.50	4.2
horizontalis perpusilla, d.b45 ½ oz.	1.25		
lactea (parneyi) d.b., N. E	.70	2.00	
lucida, clean	.80	2.25	6.0
microphylla, clean	.65	1.75	5.0
*multiflora, clean	1.00	2.80	8.0
*multiflora calocarpa, d.b	.70	2.00	
nitens, d.b	.70	2.00	
pannosa, clean		1.65	4.5
racemiflora, d.b.	.75	2.20	
racemiflora songarica, d.b	.75	2.20	
racemiflora veitchi, d.b.	.75		
rosea, clean	1.50	~.~0	
rotundifolia lanata, clean	.65	1.75	
rotununona lanata, ciedil	.65	1.75	5.0
salicifolia, clean			3.0
simonsi, d.b.	.50		3.0
thymifolia, d.b45 ¼ oz.	1.25		
zabeli, d.b	.55	1.50	0.0
CRATAEGUS crus-galli, clean		.80	2.2
intricata (coccinea), clean		.85	2.2
mollis, clean	.50		2.7
monogyna		.50	1.0
oxyacantha, clean		.50	1.2
phaenopyrum (cordata), clean	.65		4.5
punctata, clean	.50	1.25	3.5
	.45	.90	2.3
CYRPTOMERIA japonica, European seedseed	.40		
ianonica, Oriental seedseed			2.5
japonica, Oriental seedjaponica elegans	.50	.90	2.5 4.5

CUNNINGHAMIA lanceolata	oz.	1/4 lb. 1.70	1b.
CUPRESSUS arizonica (glabra or bonita) domestic seed from	.00	1.70	4.7
pyramid specimens	.65	1.65	4.50
arizonica, imported seed			
*forbesi	.50 1.75	1.10	3.00 12.00
funebris	.50	1.10	3.0
goveniana	.50	1.10	3.0
lusitanica glauca	.50	.90	2.5
lusitanica benthami	.50	1.00	2.7
macnabiana	.70	2.00	,
macrocarpa	.50	1.25	3.5
macrocarpa, from garden specimens	.50	1.40	4.0
macrocarpa, from northern sources, British Isles	.50	2.25	6.0
sempervirens horizontalis		.50	1.0
sempervirons stricta		.50	1.1
torulosa	.50	.80	2.2
torulosa majestica	.50	.90	2.5
CYDONIA (see also Chaenomeles) oblonga (vulgaris)	.65	1.75	5.0
CYTISUS *austriacus60 ½ oz.	1.50		
hirsutus	.70	2.00	
multiflorus	.50	.90	2.50
multiflorus praecox (praecox alba)70 1/4 oz.	2.00		
*multiflorus, White Gem	1.50		
nigricans	.75	2.25	6.0
purpureus50 ½ oz.	1.50		
ratisbonensis, N. E45 ½ oz.			
scoparius	.35	.55	1.50
scoparius andreanus, yellow with crimson wings55 ¼ oz.	1.50	4.25	
scoparius andreanus hybrids (dallimorei), vari-colored			
flowers in pastel shades of yellow, rose and white	0.05		
*supinus, N. E	$2.85 \\ 1.00$	3.00	
DAPHNE, mezereum, clean	.50	1.25	3.50
mezereum rubrum, clean	.85	2.50	6.78
DEUTZIA scabra (crenata) DIOSPYROS kaki	.55	$1.50 \\ .65$	1.75
lotus		.50	1.2
virginiana		.50	1.00
virginiana, northern		.50	1.2
virginiana, from trees in cultivation		.70	2.00
DISANTHUS cercidifolius	.65	1.75	5.00
DRACAENA draco, clean	.50	1.20	3.25
ELEAGNUS angustifolia, clean		.50	1.10
commutata (argentea), clean	.50.	.90	2.50
umbellata, clean	.60	1.40	4.00
ELSHOLTZIA stauntoni75 ½ oz.			
ENKIANTHUS campanulatus, N. E45 $\frac{1}{16}$ oz., .90 $\frac{1}{4}$ oz.	2.50		
ERICA arborea, clean45 ½ oz.	1.00		
carnea, clean	2.50		
ERIOBOTRYA japonica, please order in spring for summer			
delivery		4.55	2.50
		1.20	3.25
ERYTHEA (Brahea) armata, clean			
ERYTHEA (Brahea) armata, cleanedulis, cleanERYTHRINA crista-galli	.40	1.00 1.40	2.70

		1/4 lb.	1b.
EUCALYPTUS botryoides	.85	2.50	5.00
camaldulensis (rostrata)	.65	1.75	5.00
globulus, clean	.65	1.75	5.00
EUCRYPHIA glutinosa	=0	1.10	3.00
EUONYMUS alatus, clean	.50	1.00	2.75
atropurpureus, d.b	.50	.70	2.00
europaeus, clean		.70	2.00
europaeus intermedia (fructu coccineo) with bright red	70	1.10	3.00
fruit, d.b	.50		3.75
fortunei (radicans) clean	.40	1.25 1.10	3.00
japonicus, clean			3.00
oxyphyllus, clean	.50	1.00	3.00
sachalinensis (planipes), clean	1.00	2.50	
yedoensis, d.b	.60	1.50	
EUPTELEA polyandra	.80	2.25	
EVODIA danielli	.75	1.05	9 54
EXOCHORDA grandiflora	.55	1.65	3.50
AGUS sylvatica, Northern Europe		.50	1.23
FATSIA japonica (Aralia sieboldi)			
FEIJOA sellowiana		00	0.0
FIRMINIANA simplex		.80	2.2
FRANKLINIA alatamaha			
FRAXINUS americana		.50	1.3
excelsior	~ ~		.7
longicuspis sieboldiana	.50	1.10	3.0
mandshurica	.50	1.10	3.0
oregona	.50	.90	2.5
, ornus			.7
pennsylvanica lanceolata			.8
REMONTIA californica			
mexicana	2.00		
GARDENIA jasminoides (florida)	.60	1.65	4.5
GENISTA aetnensis	.50	1.25	
canariensis	.85	2.50	
fragrans	1.00	3.00	
germanica	.75		
	.55	1.55	
monosperma	ME		
monosperma pilosa	.75		
pilosaradiata	.75		
pilosa radiata tinctoria		1.65	
pilosa radiata tinctoria TINKGO biloba	.75 .60	1.65 .55	1.5
pilosa radiata tinctoria GINKGO biloba. TLEDITSIA japonica	.75		1.5
pilosa radiata tinctoria GINKGO biloba GLEDITSIA japonica	.75 .60	.55	1.5 2.5 2.7
pilosa radiata tinctoria GINKGO biloba GLEDITSIA japonica sinensis triacanthos	.75 .60	.55 .90	1.5 2.5 2.7 1.1
pilosa radiata tinctoria GINKGO biloba GLEDITSIA japonica sinensis triacanthos triacanthos inermis.	.75 .60	.55 .90 1.00	1.5 2.5 2.7 1.1
pilosa radiata tinctoria GINKGO biloba GLEDITSIA japonica sinensis triacanthos triacanthos inermis.	.75 .60	.55 .90 1.00 .50	1.5 2.5 2.7 1.1
pilosa radiata tinctoria GINKGO biloba GLEDITSIA japonica sinensis triacanthos triacanthos inermis. GREVILLEA robusta, domestic seed	.75 .60 .50	.55 .90 1.00 .50 .50	1.5 2.5 2.7 1.1 1.2
pilosa radiata tinctoria GINKGO biloba GLEDITSIA japonica sinensis triacanthos triacanthos inermis. GREVILLEA robusta, domestic seed	.75 .60 .50	.55 .90 1.00 .50 .50	1.5 2.5 2.7 1.1 1.2
pilosa radiata tinctoria GINKGO biloba GLEDITSIA japonica sinensis triacanthos triacanthos inermis. GREVILLEA robusta, domestic seed. 1.00 ¼ oz. GYMNOCLADUS dioicus. HALESIA carolina (tetraptera)	.75 .60 .50	.55 .90 1.00 .50 .50	1.5 2.5 2.7 1.1 1.2
pilosa radiata tinctoria GINKGO biloba GLEDITSIA japonica sinensis triacanthos triacanthos inermis. GREVILLEA robusta, domestic seed	.75 .60 .50 .50	.55 .90 1.00 .50 .50	1.5 2.5 2.7 1.1 1.2 .7 2.2 2.5
pilosa radiata tinctoria GINKGO biloba GLEDITSIA japonica sinensis triacanthos triacanthos inermis GREVILLEA robusta, domestic seed	.75 .60 .50 .50	.55 .90 1.00 .50 .50 .45 .80	1.5 2.5 2.7 1.1 1.2 .7 2.2 2.5
pilosa radiata tinctoria GINKGO biloba. GLEDITSIA japonica. sinensis triacanthos triacanthos inermis. GREVILLEA robusta, domestic seed	.75 .60 .50 .50	.55 .90 1.00 .50 .50 .45 .80	1.5 2.5 2.7 1.1 1.2 .7 2.2 2.5
pilosa radiata tinctoria GINKGO biloba GLEDITSIA japonica sinensis triacanthos triacanthos inermis. GREVILLEA robusta, domestic seed	.75 .60 .50 .50 3.00	.55 .90 1.00 .50 .50 .45 .80 .90	1.5 2.5 2.7 1.1 1.2 .7 2.2 2.5
pilosa radiata tinctoria GINKGO biloba GLEDITSIA japonica sinensis triacanthos triacanthos inermis GREVILLEA robusta, domestic seed. 1.00 ¼ oz. GYMNOCLADUS dioicus. HALESIA carolina (tetraptera) monticola HAMAMELIS japonica. 1.00 ¼ oz.	.75 .60 .50 .50 3.00 .50 .70	.55 .90 1.00 .50 .50 .45 .80 .90	4.50 1.50 2.50 2.71 1.10 1.20 2.5 5.20 6.0

HIBISCUS syriacus	oz.	¼ lb.	1b 1.2
syriacus, white flowered		.60	1.5
HIPPOPHAE rhamnoides.		.60	2.0
HOVENIA dulcis	.50		2.7
HYDRANGEA petiolaris	1.25	2.00	
HYPERICUM frondosum (aureum)50 1/8 oz.			
kalmianum			
IDESIA polycarpa	.70	2.00	
ILEX aquifolium, berries, domestic (French) strain, from cut-			
green orchards			3.7
aquifolium, clean		.65	1.7
aquifolium, from garden varieties	.45	.85	2.5
cornuta, domestic, cleaned and floated	.80	2.25	6.0
crenata, clean	.50	1.10	3.0
crenata convexa (bullata) N. E., d.b.	1.00		
glabra, d.b		.55	1.5
integra	.60	1.50	
latifolia	.70	2.00	5.7
opaca, clean	.65	1.70	4.7
opaca, from its northern range, clean	.75	2.15	6.0
pedunculosa, clean	.65	1.70	4.
serrata (sieboldi), clean	.60	1.50	4.
verticillata, clean	.80	2.25	6.
NDIGOFERA dosua40 ¼ oz.	1.25		
UBAEA spectabilis100 seeds .75, 500 seeds 3.00			
JUGLANS sieboldiana		.50	1.
sieboldiana cordiformis		.50	1.2
JUNIPERUS californica, d.b/	.40	.80	2.5
chinensis, clean, import grade	.60		4.5
chinensis, cleaned and floated, 80% sound seed	1.00	2.90	8.
chinensis sargenti, clean	.75	2.15	6.
communis depressa, N. E., d.b	.50	1.00	2.
communis depressa, clean	.90	2.50	7.
communis, upright columnar type, clean	.45	.65	1.
communis saxatilis (montana), clean	.80	2.25	6.
conferta (litoralis), clean	1.00	2.50	7.
monosperma. d.b.		.80	2.
*nachyphloea. d.b.	.45	.70	2.
procumbens, clean	.80		6.
rigida, clean	.50		4.
sconulorum, clean, northern	.60	1.75	5.
sconulorum dainty leaved Southern blue form, cleaned			_
and floated	.75	2.15	6.
virginiana. Southern, clean	.50	1.20	3.
virginiana. Platte River, d.b		.80	2.
virginiana. Platte River, cleaned and floated, 90% sound			
heep	.75	2.15	6.
virginiana glauca, clean	.70	2.25	6.
ADSURA janonica	.70	2.25	6.
CALMIA latifolia	1.50		
latifolia New England from garden specimens1.00 1/4 oz.	2.50		
latifolia, from native New England mountain stock, 1200 ft.			
1.00 ½ 0z.	3.00		
CALODANAY nictus (Acanthon, ricinifolius)	.80	2.25	6.0
KERRIA japonica	.60	1.40	4.0

	oz.	1/4 lb	. lb.
KOELREUTERIA paniculata		.45	1.35
KOLKWITZIA amabilis, clean, N. E	1.70		
LABURNUM alpinum	.45	.70	2.00
anagyroides (vulgare)	.45	.65	1.75
Watereri (alpinum x vulgare	2.00		
LAGERSTROEMIA indica, pink, clean	.75	2.25	6.00
indica, white	1.00	2.75	7.50
LARIX decidua (europaea) Central Alps, elev. 3,000-3,600 ft.,	.50	1.25	3.50
decidua, foothills Northern Alps, elev. 2,400-3,000 ft.,			
limestone	.50	1.25	3.75
decidua, large seeded strain from Western High Alps,			
6,000 ft., of late starting and early terminating growth,			
cold and wind resistant, straight, tall, rapid grower, a			
good timber tree, a fine ornamental	.65	1.70	4.75
leptolepis	.90	2.65	7.50
occidentalis	2.00	5.80	16.00
LAURUS nobilis, clean		.50	1.00
LESPEDEZA bicolor, clean	.50	1.25	3.50
buergeri	.45	.75	2.00
japonica	.50	.90	2.50
thunbergi (formosa)	.50	.90	2.50
LEUCOTHOE catesbaei			
LIBOCEDRUS decurrens	.50	.90	2.50
LIGUSTRUM amurense, d.b		.70	2.00
ibota, clean	.45	.80	2.25
japonicum, clean	.50	.90	2.50
lucidum, d.b	.50	1.00	2.75
obtusifolium (ibota of trade), d.b		.70	2.00
sinense ("South" Privet), clean		.65	1.75
vulgare, clean		.65	1.75
LIQUIDAMBAR styraciflua	.75	1.85	5.25
LIRIODENDRON tulipifera		.50	1.25
LIVISTONA chinensis (Latania borb.)	.50	1.10	3.00
LOISELEURIA procumbens1.00 $\frac{1}{16}$ oz.			
NANDINA domestica, home grown, berries		.80	2.25
domestica, imported, clean	.50	1.20	3.25
domestica, white berries, imported, clean	.60	1.70	4.75
LONICERA caprifolium, clean	.65	1.75	5.00
etrusca, clean	.65	1.70	4.75
henryi, d.b	1.75		
japonica, clean	.80	2.25	6.00
korolkowi zabeli, fine red flowered form, d.b50 1/4 oz.	1.50		
maacki, clean	1.50	4.25	
morrowi, clean	.70	2.25	6.00
morrowi, yellow fruited, d.b	.70	2.00	5.50
ruprechtiana, d.b.	.70	2.00	
tatarica, clean	.60	1.55	4.25
tatarica alba, d.b	.75	2.25	
tatarica rosea, d.b.	.75	2.25	
tatarica wheeleri (red), d.b	1.00	4 00	F 0-
xylosteum, clean	.70	1.80	5.25
MAACKIA amurensis	.50	1.30	3.75
MACADAMIA ternifolia		1.25	3.50
MACLURA pomifera		.65	1.75

MACNOLIA comminate		1/4 lb	
MAGNOLIA acuminata	.50	1.35	
denudata (conspicua), d.b	.50	1.25	
grandiflora, clean		1.10	
kobus, clean	.60	1.40	4.00
liliflora, d.b	.60	1.40	4.0
obovata (hypoleuca), clean	.50	1.25	3.5
sieboldi (parviflora)	1.00	2.75	7.5
soulangeana, d.b	.50	1.35	3.7
soulangeana lennei, d.b	.50	1.40	4.0
tripetala, clean	.55	1.65	4.5
virginiana (glauca), clean	.70	2.00	5.5
MAHONIA aquifolia, clean	.85	2.40	6.5
MALUS baccata, clean seed	1.50		12.0
baccata, dried pomes		.70	2.0
baccata mandshurica, dried pomes		.70	2.0
coronaria, clean	1.30	3.60	10.0
common, Apple for stock — French Cider Crab		.50	1.2
common, Apple for stock — domestic seed		.60	1.5
floribunda, clean	1.25	3.35	9.0
ioensis, clean	1.35	3.75	
*sargenti, dried pomes, N. E., Free blooming, dwarf orna-			
mental Crab, true from seed	.70	2.00	
sieboldi, clean	1.25	3.10	8.5
theifera (hupehensis), dried pomes, handsome small tree,			
very free blooming, true from seed	.50	.90	2.5
zumi, clean	1.25	3.10	8.5
zumi calocarpa, dried pomes	.50	.90	2.5
MELALEUCA leucadendron	1.25	3.25	
MELIA azedarach		.70	2.0
MENISPERMUM canadense		.70	2.0
MESPILUS germanica, clean		.70	2.0
MORUS alba, clean	.50	.90	2.5
alba tatarica, clean	.75	2.15	6.0
nigra, clean	.50	1.10	3.0
MYRICA caroliniensis (pennsylvanica) N. E. d.b		.65	1.5
MYRTUS communis, clean	.70	2.00	5.5
communis compacta	1.50		
NEMOPANTHUS mucronatus, d.b.	.50	1.10	3.0
NYSSA sylvatica, clean	.50	1.10	3.0
OLEA europaea, from wild plants		.70	2.0
euopaea, cultivated varieties		.50	1.0
OSMANTHUS aurantiacus		1.50	4.5
fragrans		1.35	4.2
ilicifolius (aquifolius)	.70	2.00	5.5
ORIXA japonica	.75	2.25	0.0
OSTRYA carpinifolia, clean	.50	.90	2.50
virginiana, clean	.75	2.15	6.00
OXYDENDRON arboreum, clean	1.25	W.13	0.00
	1.80	4.60	19 54
PALITIES aring christi (aculectus) alean	1.00		1.5
PALIURUS spina-christi (aculeatus), clean	E 0	.60	
PARKINSONIA aculeata	.50	1.15	3.2
PARTHENOCISSUS (Ampelopsis) quinquefolia, clean	4 100	.65	1.7
tricuspidata (veitchi), clean	.45	.80	2.2
PASSIFLORA coerulea50 ¼ oz.	1.25		
edulis	1.25		40.0
incarnata50 ½ oz.	1.30	3.60	10.00

	oz.	1/4 lb.	lb.
PAULOWNIA tomentosa	.45	.60	1.50
PHASEOLUS caracalla			
PHELLODENDRON amurense, clean	.55	1.35	3.75
PHILADELPHUS coronarius, clean	.55	1.35	3.75
grandiflorus	.50	1.25	3.50
pubescens, vigorous native species	1.25	1.20	0.00
PHOENIX canariensis	1.70	.50	1.20
Jack-lifens		.70	2.00
dactylifera	.50	1.10	3.00
dactylifera, Deglet Nur variety	.50	1.10	3.00
reclinata			
roebeleni		1 40	-4.0
PHOTINIA villosa, clean	.55	1.40	4.0
PHYSOCARPUS opulifolius, Ninebark	.65	1.75	5.0
PICEA abies (excelsa), Western Europe, Central Mountains of			
France (2,700 ft.)	.55	1.40	4.00
abies, Northern Europe, the vigorous Lowland strain	.55	1.65	4.5
abies, from lime stone formations in Austria (1,800-2,400			
ft.)	.50	1.20	3.2
abies, from hill origins (1,500-2,400 ft.) South Central			
Germany (Harz Mts.), South Germany and Lower			
Austria	.50	1.00	2.7
abies, alpine origins, 3,000 ft. to timber line, Central Alps			
of Europe	.50	1.25	3.5
abies, the best Norway Spruce timber stands and the tal-			
lest and largest trees are found in the Boehmerwald			
region of Europe from which seed again becomes			
available. A hill-type Spruce	.50	1.10	3.0
bicolor	1.00	2.00	8.0
breweriana	1.00	2.00	0.0
engelmanni	1.30	3.60	10.0
glauca (canadensis), from planted stands near sea-level,	1.00	0.00	10.0
Northern Europe	.65	1.75	5.0
glauca densata (Black Hills)	2.00	5.20	
jezoensis hondoensis	1.00	2.75	7.5
koyami	2.50	2.13	4.0
omorika, from wild trees of its native habitat1.25 ¼ oz.	5.00		
	6.00		
omorika, from trees in cultivation1.50 ¼ oz.		0 85	NE
polita	1.00	2.75	
pungens	1.75	4.50	
pungens glauca	2.00	5.20	
sitchensis, hardy type, Olympic range	1.80	4.75	12.5
ERIS floribunda, N. E	3.00		
formosa			
japonica, N. E	2.50		
japonica, imported	1.50		
INUS banksiana	1.25	3.35	9.0
caribaea	1.00	2.75	7.5
cembra		.50	1.2
cembroides edulis	.50	1.25	3.5
contorta	.95	2.90	8.0
contorta latifolia (murrayana)	1.30	3.60	
coulteri	.65	1.75	5.0
densiflora	.50	.90	2.5
echinata	2.00	5.20	
flexilis	.55	1.40	4.00
HEALINS	.55	1,40	4.0

PINUS (continued)	oz.	1/4 lb.	lb.
flexilis reflexa	.60	1.60	4.50
griffithi (excelsa)	.50	.85	2.50
halepensis		.60	1.50
halepensis brutia		.65	1.75
jeffreyi	.60	1.50	4.25
khasya	1.25	3.60	
koraiensis	.50	1.25	3.50
lambertiana	.55	1.40	4.00
merkusi	1.25	3.60	
mugo (montana), Lowland seed	.50	1.10	3.00
mugo gallica	.60	1.50	4.25
mugo mughus, Tyrolean Alps, dwarf type	.83	2.25	6.00
mugo pumilio, dwarfest of mugo group from Eastern			
Alps (limestone), 6,000 ft	1.15	3.10	8.50
mugo rostrata (uncinata), European Alps	.60	1.50	4.25
mugo rostrata (uncinata), Lowland seed	.55	1.10	3.00
monticola	1.00	2.80	8.00
muricata	.65	1.75	
nigra, Hill strain, elev. 900-2,100 ft. from the heart of the			
Austrian Pine country in Austria	.50	1.30	3.75
nigra, Northern Europe, from planted stands near sea level	.55	1.40	4.00
nigra, South Central Europe, Apennines Mountains, elev.		4 40	
2,100-2,700 ft	.55	1.10	3.00
nigra poiretiana, Mainland form from Calabria	.50	1.10	3.00
palustris	0.5	1.25	3.50
parviflora (pentaphylla)	.65	1.75	5.00
pinaster (maritima)		.60 .50	1.25 1.10
pineaponderosa, Colorado	.60	1.65	4.50
ponderosa, Northern Rockies	.60	1.50	4.25
ponderosa, from the timber areas of its maximum devel-	.00	1.50	4.20
opment in So. Oregon and California	.75	1.90	5.50
ponderosa scopulorum	.55	1.40	4.00
pumila	1.00	2.75	7.50
radiata (insignis)	.50	1.10	3.00
resinosa, Lake States	2.00		16.00
resinosa, Pennsylvania crop	2.25	_	17.50
rigida N. E.	.65	1.75	5.00
sabiniana		.60	1.75
strobus, Lake States Race	1.00	2.80	8.00
strobus, from planted stands in Europe	.80	2.25	6.50
sylvestris, for diversity of requirements a choice of strains			
is offered: See page 28, Pine Lore.			
A. Strains from the plains of Northern Europe from stands growing on sandy soil. All are suitable for timber production:			
Seed from Denmark, dune plantations, 66,500 seeds			
per pound	.60	1.65	4.50
Seed from Northern Germany	.80	2.30	6.25
Seed from Poland	1.00	2.80	8.00
Seed of West Baltic origin, a rugged northern			
strain, see Pine Lore, page 28. 90,000 seeds per			
pound	1.75	4.50	12.00
12			

F. W. SCHUMACHER Sandwich. Mass. oz. 1/4 lb. lb. PINUS (continued) Seed from stands in Denmark grown from Swedish seed, Ulstrupgard forest district, Randers County, Jutland, certified by district officer..... 1.80 4.60 12.50 B. Mountain Strains. Recommended for ornamental use, Christmas tree stock, forest planting: Seed previously offered as green strain from origins in Western Europe is now and has been available for some time from highland forests in France, elevation 2,700-3,600 feet. Inclined to be fast growing of bushy habit it is suitable for many uses - windbreaks, shelter plantings, landscaping. Its wood, reported to qualify with that from northern strains, warrants a trial for timber production. 86,000 seeds per pound..... .65 1.75 5.00 Seed from Austrian Forests, hill strain, 1,400 feet, green needles, straight stems, small crowns. 78.-500 seeds per pound..... .80 2.25 6.00 Seed from native Scotch Highland stands, Scotland, moderate grower, bluish-green, short needled, straight stemmed, a variety close to rigensis, 55,000 seeds per pound..... 1.75 4.50 12.00 seed from Rigensis type trees, Northern New York State, Hill Country, elevation, 1,300 ft. 2.00 5.50 15.00 tabulaeformis (sinensis)..... 1.25 3.50 10.00 taeda 1.00 2.80 8.00 thunbergi .55 1.15 3.35 torreyana 2.90 8.00 1.00 PITTOSPORUM tobira, clean..... .50 1.10 3.00 PLATANUS occidentalis, clean..... .50 1.35 orientalis, clean..... .50 1.25 PODOCARPUS macrophyllus..... 3.25 1.15 nagi 1.15 3.25 POINCIANA gilliesi..... .60 1.30 3.50 (Delonix) regia.... 2.25 .75 6.00 PONCIRUS (Citrus) trifoliata..... .501.25 PRUNUS americana, clean..... .60 1.50 amygdalo-persica, Hardy Almond, deserves attention for its large pink flowers in early spring..... .501.50 4.50 amygdalus (communis) Sweet Almond..... .75 amygdalus (communis), Bitter Almond..... .80 armeniaca, clean (Apricot)..... .80 armeniaca ansu, clean, hardy Japanese Apricot, close to mandshurica with better fruit..... .90 avium, Mazzard, clean..... .50 1.25 besseyi, clean..... 1.50 4.25 .60

14

1.25

.60

.50

.70

1.10

1.10

1.70

3.50

1.50

1.00

2.00

3.00

3.00

4.75

.50

.50

.50

1.00

.60

campanulata

caroliniana

cerasifera (Myrobolan), clean....

demissa melanocarpa, clean.....

grayana

ilicifolia, clean....

incisa, d.b., domestic (N. E.) seed......40 1/4 oz.

incisa, clean, imported.....

	oz.	1/4 lb.	lb.
PRUNUS (continued) insititia, N. E		00	2.50
japonica	.50 .55	.90 1.40	4.00
laurocerasus (officinalis), clean	.00	.60	1.50
lyoni (integrifolia), clean	.50		3.00
mahaleb	.50	.65	1.75
maritima, N. E., d.b.		.70	2.00
maximowiczi	.90		7.50
mume, clean		.55	1.50
mume var. Bungo, red flowered	.50		2.75
nipponica, close to incisa, flowers twice larger	1.25	3.00	8.50
nipponica kurilensis, flowers still larger	1.25	3.35	9.00
padus, clean imported	.50	1.10	3.00
pennsylvanica	.50	1.00	2.75
pseudocerasus, white fragrant flowers, early, edible red			
fruit	1.00	2.80	
salicina (triflora)		.45	.95
*sargenti (serrulata sachalinensis) clean	.50	1.10	3.00
*sargenti, red flowered	.60	1.70	4.75
serotina, clean		.55	1.50
serrulata, clean	.50	.90.	2.50
serrulata albida (speciosa), white	1.00	2.80	
serrulata lannesiana	.50	.90	2.50
spinosa, clean		.50	1.25
subhirtella, clean	.50	1.00	2.75
subhirtella ascendens	.75	2.15	
subhirtella pendula, clean	.50	1.10	3.00
tomentosa, domestic, clean	1.00	2.80	
tomentosa, imported	.50	.80	2.25
triloba		.80	2.25
virginiana, clean	~0	.65	1.75
*yedoensis	.50	.80	2.25
PSEUDOLARIX kaempferi (amabilis)	.55	1.20	3.25
PSEUDOTSUGA douglasi, Interior strain, Northern Rockies	1.80	4.00	12.50
(caesia)	2.00		14.00
douglasi glauca, Colorado strain	2.50		18.50
douglasi viridis, Coast from, Oregon, Washington	2.50	.50	1.25
PTELEA trifoliataPUERARIA thunbergiana	.50	1.00	2.75
PYRACANTHA coccinea, clean.	.50	.80	2.25
coccinea lalandi, clean	.55	1.20	3.25
coccinea lalandi, d.b., N. E. hardy strain, plants wintering	.00	1.20	0./40
at Boston	.75	2.25	
PYRUS common pear, domestic seed	.50	1.10	3.00
common pear, French imported	.75	1.95	5.50
pyrifolia (serotina)	.80	2.25	6.00
ussuriensis	.80		6.50
QUERCUS ilex, Evergreen Oak, from proper storage			1.00
palustris — not less than 5 lbs. sold			.60
RAPHIOLEPIS indica		1.40	4.00
umbellata (japonica)		1.25	3.50
RHAMNUS californica, d.b	.50	1.10	3.00
cathartica, clean	.50	.90	2.25
crenata, N. E., less known than frangula, but more meri-			
torious, may easily be grown into a small tree	.70	2.00	
davurica, clean	.50	1.10	3.00

	oz.	¼ lb.	lb.
RHAMNUS (continued)			
frangula, clean	.60	1.65	4.50
purshiana, clean	.55	1.25	3.50
RHODODENDRON arboreum, blood red75 1 oz.			
arboreum, mixed shades			
auriculatum			
brachycarpum			
calophytum			
campanulatum			
cantabile85 $\frac{1}{32}$ oz.			
carolinianum, N. E			
carolinianum, blush50 pkt.			
carolinianum, white			
catawbiense95 ½ oz.	2.85		
catawbiense compactum, N. E1.25 $\frac{1}{16}$ oz.			
caucasicum			
cerasinum			
chrysanthum			
· cinnabarinum aestivale			
decorum			
diaprepes1.00 $\frac{1}{32}$ oz.			
discolor			
eximium1.00 pkt.			
ferrugineum60 ½ oz.			
fortunei , a hardy strain, N. E1.00 $\frac{1}{32}$ oz., 3.00 $\frac{1}{8}$ oz.			
fulvum			
haematodes			
hippophaeoides			
hirsutum			
leucaspis	0.70		
maximum, N. E	3.50		
ponticum, Northern Europe, garden strain70 1/4 oz.	2.00		
racemosum			
smirnowi1.00 $\frac{1}{16}$ oz.			
soulei1.00 $\frac{1}{32}$ oz.			
tephropeplum1.00 $\frac{1}{32}$ oz.			
wardi			
williamsianum			
RHODODENDRON HYBRIDS: see listing on page 24.			
	.55	1.40	4.10
RHODOTYPOS scandens (kerrioides)			
RHUS canadensis (aromatica), clean, N. E	.65	1.75	5.00
copallina, d.b		.45	1.20
glabra, d.b		.45	1.25
trilobata, clean	.50	1.25	3.50
typhina, clean		.55	1.50
RIBES aureum, d.b., N. E	1.00		
ROBINIA hispida fertilis	1.25	3.50	10.00
pseudoacacia, imported seed (the Eastern U.S. strajzi)		.50	1.00
pseudoacacia, domestic seed, Idaho strain		.70	2.00
pseudoacacia inermis	50	.90	2.50
pseudoacacia inermis	.50		
ROSA arkansana, clean	.75	2.15	6.00
blanda, clean	.50	1.35	3.75
canina, clean		.50	1.10
carolina (humilis) d.b		1.10	3.00
eglanteria (rubiginosa), clean		.80	2.25

ROSA (continued)	oz.	¼ lb.	116
fujisanensis, clean	.45	1.25	
hugonis, d.b.	1.25		
multiflora, thornless, clean	.50		3.0
multiflora, thorny, domestic seed	.60		4.5
multiflora, thorny, clean, imported	.50	.90	2.5
nitida, dried hips	,,,,	1.15	3.2
palustris, d.b		1.10	3.0
primula, d.b.	1.00		
rugosa, clean	.50	1.00	2.
rugosa, deep red selection, N. E., clean	.55	1.50	
rugosa, white, N. E., clean	.60	1.65	
setigera, dried hips		.55	1.
setigera, clean	.60	1.65	4.
spinosissima, clean	.75	2.15	6.
spinosissima altaica, clean	1.50		
virginiana (lucida), cleanwichuraiana, clean	.75	2.15	6.
wichuraiana, clean	.40	1.00	2.7
RUSCUS aculeatus, clean	.50	.90	2.
SAMBUCUS canadensis, clean	.45	1.20	3.2
nigra, clean		.55	1.5
racemosa, clean	.40	1.00	2.7
SAPINDUS drummondi	.40	.90	2.
mukorossi	.40	1.00	2.
SASSAFRAS albidum (varifolium)		.85	2.
SCHINUS molle		.65	1.
terebinthifolius	PM P*	.90	2.5
SCHIZOPHRAGMA hydrangeoidesSCIADOPITYS verticillata	.75	2.20	PV S
	1.00	2.75	7.5
SEAFORTHIA elegans250 seeds 1.25, 1,000 seeds 3.50 SEQUOIA gigantea	2.85	8.00	99 4
sempervirens, California seed only	1.10	3.00	8.
SHEPHERDIA argentea, clean	.85	2.50	7.0
SMILAX rotundifolia, d.b	.00	.70	2.0
SOPHORA japonica		.55	1.
japonica seed from pendula form		.55	1.0
secundiflora		.00	***
SORBUS alnifolia, clean	.75	2.15	6.0
americana, d.b.	.50	1.10	3.0
aria, clean	.65	1.75	5.2
aucuparia, imported, clean	.70	1.85	5.5
decora, d.b			
domestica, clean	1.25	3.50	
torminalis, clean	.70	2.00	
SPARTIUM junceum		.50	1.2
STAPHYLEA bumalda	.50	1.25	3.5
trifolia	.50	.90	2.5
STEWARTIA monadelpha, N. E	2.00		
pseudocamellia, imported	1.00	3.00	
serrata, N. E			
STYRAX americana		.70	2.0
japonica	.50	.85	2.5
		1.15	3.2
obassia	.50	1.10	
	.50 1.00	2.75	01.4

A. T. DOMESTICAL TO SERVICE AND ADDRESS OF THE PROPERTY OF THE		1/ 17	17
SYMPLOCOS paniculata, conspicuous in flower (white) and	oz.	1/4 lb.	Ib.
fruit (bright blue)	.60	1.65	4.50
SYRINGA amurensis japonica	1.75	4.50	12.00
henryi	1.00	3.00	
josikaea	.85	2.35	
josikaea pallida	1.00		
josikaea rosea	1.00	3.00	
villosa	1.40	4.00	11.0
villosa rosea	1.00	3.00	
vulgaris	.50	1.10	3.0
vulgaris alba	.75	2.20	5.7
TAMARIX gallica		.70	2.00
TAXODIUM distichum		.60	1.50
distichum, clean		.90	2.5
TAXUS baccata		.60	1.6
baccata erecta, N. E.	1.20	3.25	1.0
baccata stricta (fastigiata)	.50	1.25	3.50
cuspidata, N. E.	1.30	3.60	
cuspidata, seed from Japan (the so-called capitata form)	.50	1.10	3.00
media hicksi, N. E.	1.65	4.50	
TETRAPANAX (Aralia) papyriferum	1.75		
	1.10	00	4 11/
THEA (Camellia) sinensis		.60	1.50
THUJA occidentalis	.80	2.25	6.0
occidentalis, Northeastern or Lake States	1.00	2.80	8.0
occidentalis pyramidalis	1.25	3.50	
orientalis		.60	1.6
orientalis, New England seed	.50	1.25	3.5
orientalis, from select pyramids, N. E	.85	2.25	0.0
orientalis aureaorientalis aurea nana	.45 .50	.80 1.25	2.25 3.50
orientalis compacta	.45	.80	2.2
orientalis elegantissima	.75	.00	2.2
orientalis pyramidalis	.45	.80	2.2
orientalis tatarica.	.50	.90	2.5
plicata, Northern Rockies	1.40	4.00	
plicata, from Garden specimens	.65	1.70	4.7
TILIA americana		.55	1.5
cordata		.60	1.6
platyphyllos		.50	1.2
tomentosa		.50	1.2
TORREYA californica.		.85	2.5
nucifera		.65	1.7
TRACHYCARPUS excelsus, (fortunei)		.60	1.5
TSUGA canadensis, Northern crop	2.00	5.60	
diversifolia	1.25	3.30	9.0
sieboldi	1.25	3.00	9.0
ULEX europaeus	.45	.75	2.0
europaeus nanus	.75	2.00	1 =
ULMUS americana		00	1.5
campestris, N. E		.90	2.5
pumila		.90	2.5
UMBELLULARIA californica		1.15	3.23

WACCOUNTERS and James All		1/4 lb.	lb.
VACCINIUM canadense, d.b.		2.25	
corymbosum, d.b.	.80	2.25	
corymbosum, d.b., from large fruited cultivated named	0.0	0.50	
varieties	.90		
pennsylvanicum (angustifolium), d.b	.90		
VIBURNUM acerifolium, clean	.50	1.25	3.50
alnifolium, d.b	.50		3.50
americanum (trilobum), clean	.85	2.40	6.75
bitchiuense, d.b	1.50	4.50	
carlesi hybrids, forms intermediate between carlesi and			
bitchuiense	1.50		
cassinoides, d.b	.50	.90	2.50
dentatum, d.b		.70	2.00
dentatum, clean	.55	1.40	4.00
*dilatatum, clean	.50	1.15	3.25
lantana, clean		.70	2.00
lantana rugosum, d.b., attractive foliage, large showy			
clusters of fruit	.60	1.50	4.25
lentago, clean	.50	1.25	3.50
odoratissimum, clean	.50	1.25	3.50
opulus, clean	.50	1.15	3.25
prunifolium, clean	.55	1.45	4.25
rhytidophyllum, d.b.	.50	1.35	3.75
rufidulum, clean	.50	1.40	4.00
sargenti, clean	.50	1.25	3.50
sieboldi, clean		1.65	4.50
tinus, d.b.		.50	1.25
tomentosum, clean		1.45	4.25
wrighti, clean, imported	.60	1.65	4.50
wrighti, from grafted specimens, N. E., clean	1.00	2.75	
VITEX angus castus		.55	1.50
VITIS coignetiae	.50	1.10	3.00
riparia (odorata) the true, hardy Riverbank Grape, with		2120	0.00
fragrant flowers and sweet, very early ripening fruit	.75	2.00	5.50
WASHINGTONIA filifera		.90	2.50
robusta		1.00	2.75
WEIGELA, garden varieties.	1.00	1.00	~
WISTERIA floribunda (multijuga) blue	.50	1.10	3.00
floribunda. white	.50	1.35	3.75
frutescens	.50 .50		2.50
	.50 .50		2.25
sinensis, blue			
sinensis, white	.50	1.20	3.25
XANTHOCERAS sorbifolium	.50		4.50
ZANTHOXYLUM americanum	.50	1.10	0.00
ZELKOVA serrata		1.10	3.00
ZIZYPHUS jujuba, clean		.80	2.25

SEEDS — HERBACEOUS PERENNIALS — MISCE	ELLA	NEC	US
		¼ lb.	lb.
ACHILLEA filipendula, Parker's variety50 1/4 oz.	1.50		
ACONITUM napellus40 ½ oz.	.75	2.75	
ALYSSUM saxatile campactum30 ½ oz.	.75	2.75	
saxatile compactum, home grown, extra compact selection	1.25	3.00	
ANCHUSA italica Dropmore, Gentian Blue	.45	1.10	3.25
myosotidiflora			
ANTHEMIS kelway, yellow	.40	1.25	
tinctoria, golden orange	.90		
AQUILEGIA coerulea, true Rocky Mountain Longspurred			
Blue Columbine, choice garden grown seed			
$.65_{-16}^{-1}$ oz., 2.00_{-14}^{-14} oz.			
Longspurred Blue Shades, home grown strain perfected			
by years of selective breeding, plants 3 to 4 feet high			
with huge flowers	6.00		
Longspurred Crimson Star	3.75		
Longspurred Hybrids in mixture, choicest domestic strain,			
claimed by prominent grower superior to any, many	W 00		
unusual shades	7.00		
Longspurred Hybrids, Mrs. Scott Elliots'	1.50		
ARABIS alpina, dwarf Snow Cap variety35 1/8 oz.	1.50 .60	1 50	
alpina, giant flowered, early	.00	1.50	
ARALIA hispida, native woodland perennial, fruit relished by birds	.75	2.15	
ARMERIA formosa hybrids	1.00	2.10	
formosa, Giant Rose-Pink	1.00		
ASCLEPIAS tuberosa	1.50		
ASPARAGUS plumosus nanus 50 ¼ oz.	1.25	3.75	
plumosus robustus	1.75	5.25	
sprengeri	1.25	3.75	
ATROPA belladonna	.90	00	
AUBRIETIA leichtlini, Carmine rose	1.25		
purpurea, clear purple	1.25		
Large Flowered Hybrids	1.25		
BAPTISIA australis 30 ½ oz.	.60	1.80	5.50
CAMPANULA carpatica, blue, white or mixed, each35 1/4 oz.	.80		
persicifolia, white, blue or mixed — each	1.00		
Telham Beauty40 ½ oz.	2.00		
CARNATION, hardy Grenadin, Bright scarlet, King of the			
Blacks, Rose Queen, Pure White, Yellow Queen -			
each	2.00		
Grenadin, choicest mixed50 ½ oz.	1.50		
Professor Malmgreen, early dwarf Vienna, double, brick			
red			
Simon's Triumph, hardy C. choice double blend			
.35 $\frac{1}{16}$ oz., .75 $\frac{1}{4}$ oz.			
Teicher's, fine large flowered hardy strain, wide range			
of colors			
Teicher's Scarlet	* 00		
CASSIA marilandica	1.00		
CERASTIUM tomentosum	.65		
CHRYSANTHEMUM Shasta Daisy, Alaska35 ¼ oz.	.60		
Snowdrift, giant flowered	.85		
May Queen, earliest large flowered35 ¼ oz.	.75		
CLEMATIS recta35 ¼ oz.	.75		

r. w. schollacher	•	<u>.</u>		anuw	ICH, I	VI 455.
				oz.	¼ lb.	lb.
CONVALLARIA majalis	35	1/4	oz.	1.00		
CYCLAMEN europaeum	80	$\frac{1}{16}$	oz.			
neapolitanum	80	$\frac{1}{16}$	oz.			
DELPHINIUM, all home grown, quality seeds in	strai	ns	ac-			
climated to U.S.A. conditions:						
Belladona Improved40 $\frac{1}{16}$ oz.,	1.00	1/4	oz.			
Bellamosum Improved40 ½ oz.,	1.00	1/4	oz.			
Cardinale	.60	1/4	oz.	2.00		
Gold Medal Hybrids35 ½ oz.,				2.50		
Lamartine	1.00	1/4	oz.	3.50		
Pacific Giants						
Astolat series, novel shades with dark bee						
1.00_{-16}^{-1} oz.,						
Black Knight, dark blue1.00 1 0z.,	2.50	1/4	oz.			
Blue Bird, clear medium blue, white bee						
1.00 $\frac{1}{16}$ oz.,			oz.			
Blue Jay, brilliant medium clear blue, dark						
1.00_{-16} oz.,	2.50	1/4	oz.			
Cameliard, pure lavender, white bee						
1.00 $\frac{1}{16}$ oz.,						
Galahad, glistening white, very large flow						
inches)	2.50	1/4	oz.			
Guinevere, light pink-lavender, white bee	0.50	1/				
$1.00 frac{1}{16}$ oz.,		1/4	oz.			
King Arthur, brilliant dark violet, white b		1/				
$1.00 \frac{1}{16} \text{ oz.,}$						
Lancelot, clear lilac self1.00 ½ oz.,						
Percival , white, black bee1.00 $\frac{1}{16}$ oz.,						
Summer Skies, clear light blue1.00 ½ oz.,						
Pacific Giants, formula mixture of above v						
.75 $\frac{1}{16}$ oz.,				1 50		
DIANTHUS deltoides erecta, bright red				1.50 1.75		
plumarius, Mayflower, early dwarf double plumarius, semperflorens, Spring Beauty, double				2.00		
plumarius, dwarf double				1.25		
DICENTRA eximia				1.50		
DICTAMNUS fraxinella rosea	25	74 1/.	02.	.80	2.50	
DIGITALIS Shirley, best variety, large flowered, s			UZ.	.00	2.50	
bidilitals similey, sest variety, large nowered, s	.25		07	.60		
purple	25	1/4	07	.50		
white				.50		
yellow				.60		
GYPSOPHILA paniculata, white		-		.35	.75	2.00
paniculata, Double Snow Flake				2.10		A.00
repens, rose or white	35	1/4	07	.90		
HELIANTHEMUM mutabile				1.00		
HELLEBORUS niger				1.30	3 60	10.00
IBERIS sempervirens, Candytuft, home grown				2.10	0.00	10.00
LATHYRUS latifolius, Rose, N. E				1.00		
latifolius, White Pearl, N. E				1.00		
splendens	70	1/4	07	2.00		
LAVANDULA vera (true Lavender)	40	1/4	07	2.00	3.00	
LESPEDEZA capitata	10	/4	UL.	2.00		15.00
hirta		• • • • •	•••••	2.00	5.50	10.00
LINUM narbonense, Heavenly Blue	50	1/2	07	~.00	0.00	
LIN UNI Har bulletise, Heavenly Dide		18	UL.			

	oz.	1/4 lb.	lb.
LOBELIA cardinalis, hardy Northern strain, N. E.			
LUPINUS arboreus, Golden Spire		1.50	
polyphyllus, Blue		.60	2.00
Blue King, bright blue with long spikes35 ¼ oz.		.00	2.00
Carmine King, carmine red		1.00	3.00
Rose			2.65
Rose and White (moerheimi), free blooming, fine		1.00	A.00
compact habit30 1/4 oz.		1.50	
Princess Juliana, bright pink	.40		3.00
Salmon Shades			2.75
Skyblue (coelestinus)			2.75
Violet (atroviolaceus)	.40		2.75
White		1.00	2.50
Yellow Shades, true from seed		1.25	2.75
Yellow King, pure yellow	.65	1.50	A
Mixed Colors		.90	2.25
English Hybrids, Art Shades of many colors40 ¼ oz.		2.10	W.W.
Russell Hybrids, home grown, N. E40 ¼ oz.		3.00	
Russell Hybrids, imported seed		1.25	3.75
LYCHNIS chalcedonica		1.10	3.00
viscaria splendens.			0.00
WIMOSA pudica		2.25	
DENOTHERA macrocarpa 65 ¼ oz.		N.NO	
missouriensis			
PAEONIA officinalis		1.25	
peregrina		1.00	
PAPAVER nudicaule, Cardinal, deep red35 1/8 oz.		1.00	
nudicaule, Coonara strain, salmon, rose and pink shades	1,10		
.35 ½ oz.	1.50		
nudicaule, Gibson's New Orange			
nudicaule, Sanford's Giant strain			
orientale, stiff stemmed bracteata type			
orientale Hybrid varieties			
PENSTEMON cyananthus, 3 ft., deep purple35 ¼ oz.			
PHYSALIS francheti, Giant Lanterns30 ¼ oz.			
PLATYCODON Dwarf—Blue, White or Mixed, each50 ¼ oz.			
Early flowered, blue			
PRIMULA japonica, home grown			
veris, Blue Shades45 $\frac{1}{16}$ oz., 1.20 $\frac{1}{8}$ oz.			
Giant Munstead, light shades			
Large flowered, Border Mixture			
Gold Laced			
Golden Yellow			
Lutea, bright Yellow			
Ruby Red			
White			
Teicher's Colossal strain, giant flowered, wide range			
of colors			
PYRETHRUM, Giant Flowered, double			
James Kelway, bright vermillion red, yellow center	~.00		
.50 ¼ oz.	1.50		
Robinson's Giants, mixture55 ½ oz.	1.65		
Robinson's Dark Carmine	1.65		
ROMNEYA coulteri	2.50		

	oz.	¼ lb.	lb.
SAPONARIA ocymoides40 1/4 oz.	.75		
SCABIOSA caucasica goldingensis, deep lavender .60 1/4 oz.	1.75		
caucasica, House's strain	1.75		
caucasica perfecta50 ½ oz.			
THERMOPSIS caroliniana		2.00	6.00
THYMUS serpyllum45 ½ oz.			
vulgaris			
TRIFOLIUM repens atropurpureum			
TROLLIUS europaeus, lemon yellow45 ¼ oz.			
Orange Globe, dark yellow35 $\frac{1}{16}$ oz., .85 $\frac{1}{4}$ oz.			
Ledebouri , dark orange			
YUCCA filamentosa	1.00	3.00	
ZOYSIA japonica, promising new Turf Grass from Japan		1.10	3.00

AZALEA AND RHODODENDRON HYBRIDS

If exclusively taken from this section please have your order amount to at least \$3.00.

AZALEA — Deciduous:

ZALEA — Deciduous:
Altaclarensis (mollis x viscosa) orange yellow, blotched
.75 nkt., 2.00 ± oz.
Calendulacea x arborescens
Embley Hybrids — a parallel development of the Exbury
Hybrids — all colors, shades of yellow, pink, red
1.00 pkt., 2.00 $\frac{1}{32}$ oz., 6.00 $\frac{1}{8}$ oz.
Embley Apricot, apricot pink
1.00 pkt., 2.00 $\frac{1}{32}$ oz., 6.00 $\frac{1}{8}$ oz.
Ghent Hybrids, all colors1.25 $\frac{1}{16}$ oz., 3.75 $\frac{1}{4}$ oz.
Exbury Hybrids, choice race, a separate development of
Knaphill Hybrids, all colors1.00 pkt., 2.00 $\frac{1}{32}$ oz.
Knaphill Hybrids, the result of prolonged breeding inter-
crossing mollis, pontica (ghent), calendulacea and
occidentalis strains1.00 pkt., 2.00 $\frac{1}{32}$ oz., 6.00 $\frac{1}{8}$ oz.
Mollis Hybrids (mollis x japonica)
All — .75 pkt., 1.00 $\frac{1}{20}$ oz.
Koster's Brilliant Red, glossy orange red
Lemonora, apricot, center rose
Mrs. Oliver Slocock, rich orange-yellow, suffused
terra-cotta
Robespierre, orange-red
Mollis Hybrids, from choice collection of named
varieties
Hinodegiri
ing Ushrida (leaffolia), Vigorous, free bloom-
ing Hybrids
indica (macrantha), garden varieties, N. E1.00 pkt.
Indica Hybrid x mucronata, large lavender flowers
1.00 pkt.
Maxwelli x scabra, large flowered, red
Obtusa arnoldiana (obt. amoena x obt. kaempferi)
Cardinalis, deep red
Pink and Rose shades

F. W. SCHUMACHER
AZALEA HYBRIDS (continued)
Obtusa kaempferi hybrids (malvatica x kaempferi), very
hardy and free blooming, in shades or red and mixed,
each
Obtusa kurume, from named varieties
Sanderi Hybrids (obtusa forms x Indian Azaleas) valu-
able, free blooming hybrid strain resembling
Kaempferi Hybrids but later flowering and, appar-
ently, just as hardy.
Rose and Salmon shades1.00 pkt., $2.00 \frac{1}{32}$ oz.
Scarlet
RHODODENDRON HYBRIDS
Selection of popular varieties as grown by England nurserymen. All ar
time tested and valued for their hardiness, good foliage, full flower trusses
ability to stand exposure:
Varieties each
Blend of all varieties1.00 $\frac{1}{32}$ oz., 3.50 $\frac{1}{8}$ oz.
American items priced separately
Alice, rose pink
Ascot Brilliant, deep crimson
Azor x griersonianum1.25 $\frac{1}{32}$ oz.
Bagshot Ruby, blood-crimson
Beauty of Littleworth (griffith hyb.), white
Britannia, bright crimson red
Catawhiense Hybrids, N. E.
Seed from album elegans selections, tall and fast
growing, quite true from seed in shades of white
and blush
Pink and rose shades
Seed from red flowered plants1.25 1/16 oz.
Mixed seeds75 $\frac{1}{16}$ oz.
Catawbiense x Maximum (Wellesleyanum)60 \(\frac{1}{16}\) oz.
Corona, coral pink
Doncaster, scarlet crimson
Fortunei x Hardy Hybrids, from choice N. E. plants
$1.00 \frac{1}{32}$ oz., $2.50 \frac{1}{8}$ oz.
Geoffrey Millais, white
Goldsworth Pink, pink
Iveryanum, scarlet
Jersey Cream, creamy yellow
J. J. De Vink, glowing crimson
Lady Clementine Mitford, peach pink, deeper margin
Lady Primrose, lemon yellow, red spots
Loder's White, pale mauve passing to pure white, large trusses
Madame de Bruin, cerise red
Meg Merillies, creamy white, shaded yellow and apricot
Mother of Pearl, blush turning snow-white
Mrs. A. R. Bide, deep pink, with brown-crimson ray
Pink Pearl, rose-pink Queen Wilhelmina, large luminous cerise red
Rose Perfection, deep rose shaded glowing crimson
Smirnowi x Hardy Hybrids75 1 oz.
Smirnowi x maruy myunus 16 02.

White Queen, pure white
Williamsianum Hybrids......1.00 ½ oz.

Yellow Loderi, yellow

RHODODENDRON HYBRIDS as listed in Rhododendron Stud Book of the Royal Horticultural Society. Most all of recent origin, some classical hybrids of long standing. All promising breeding material. See page 27.

Unless priced otherwise—Packets 1.00 each, 2.00 $\frac{1}{32}$ oz. Aladdin (grierson. x auricul.), brilliant salmon-cerise Albatross (loderi x discolor), tall growing, large leaved, large trusses, white to shell pink.

Azor (gries. x discolor), soft salmon pink trumpet
Bonito (discolor x Luscombei), white chocolate blotch
Carmania (Souvenir of Anthony Waterer x eriogynum)
Cornish Cross (thoms. x grifth.), superb foliage, large
crimson trusses

Cremorne (luscombei x campyl.), rose pink passing to soft yellow

Cupid (griff, x luscombei)

Fabia (dichr. x grierson.), low spreading, orange-salmon Fireball (barbatum x Ascot Brilliant), bright red

Garnet (griff. x broughtoni), bright pink

Isabella (griff. x auric.), large fragrant white

shrub, creamy yellow-orange, pink-maroon blotch
2.00 pkt., 3.00 ha oz.

Lodauric (Loderi x auricul.), giant grower, huge trumpets, white, fragrant late

Loderi (griff. x fort.)

Variant King George, pink buds opening white Variant Venus, white, pink flushed

Variant White Diamond, clear blush

Luscombei (fort. x thoms.), large pink, excellent foliage Master Dick (griers. x Don), large trusses, carmine-scarlet Mrs. Kingsmill (Penjerrik, A. M. var.) (campyl. el. x griff.) yellow

Mohamet (dichr. x Tally Ho), bell shaped, orange-crimson, brown spotting

Orestes (shilsoni x griers.), soft orange-pink Pink Shell (griff. x H. M. Ardene), rose-pink

Polar Bear (diaprepes x auric.), magnificent late flowering giant, large white trusses......2.00 pkt.

Queen o' the May (pink bell x griers), excellent white Rosabel (pink shell x grier.), large pale pink, darker veins Sarita Loder (griers. x Loderi), large pink trumpets, large loose trusses

Shilsoni (thoms. x barb.), deep crimson red
Snow Queen (griff. x maximum x Loderi), pure white
Souldis (soulei x disc.), large trusses, white bell shaped
flowers

Tally Ho (griers. x eriogynum), bright vermillion Touchstone (griff. x?), Neyron rose

NOTES OF INTEREST

DORMANCY IN SEEDS OF PINE, SPRUCE, OTHER CONIFERS—Failure to germinate promptly certain conifer seeds is often due to the fact that no consideration had been given to dormancy factors. Seeds most usually concerned are: — White Spruce, White Pine, other Pines of the Cembra, Flexilis and Strobus groups.

In Fir (Abies), Hemlock (Tsuga), Douglas Fir (Pseudotsuga) Sitka Spruce dormancy occurrence is variable with dormancy found in some lots and none in others.

In Blue Spruce (Picea pungens) fifty percent of seeds are dormant, the other half fast germinating.

Late spring planting of all of the before mentioned is apt to result in total failure or partial germination only. Fall planting for some, early spring planting for others or pre-treatment (stratification) of seed lots will be required for best results. Growers are requested:—

A. To consult reference books for these problems.

B. For earliest spring planting to prepare their beds in the fall, not to touch bed surface at sowing time but to dress with dry peatmoss, sow and cover with peatmoss and shades. Boarding-in of beds will facilitate this procedure.

ABIES ALBA PECTINATA—SILVER FIR—the preferred Christmas tree (Tannenbaum) in Central Europe. Recommended for trial in place of Balsam Fir over which it has the advantage of dark green needle color and of being more submissive to cultivation.

ROSA PRIMULA (formerly ecae) — with pale yellow flowers preceding its close relative Rosa hugonis and surpassing it in these points: Ease of cultivation, faster and larger increase, healthy spotless foliage, heavier bloom and fruiting.

AZALEA — Attention again is called to the Kaempferi Hybrids (A. obtusa kaempferi crosses with malvatica and hinodegiri) exceeding, as garden plants, the parent races. They are compact in habit, more amenable to exposure, larger of flower, extremely free blooming in bright colors, hardy to Zone 5. A good word should also be said in favor of the Arnoldiana Hybrids of similar parentage. Even hardier than the preceding they are taller in habit. Their true charm and flower quality is revealed only when they have achieved some stature. While the Hybrids are true garden subjects, requiring no over-head shade the parent type Azalea obtusa kaempferi is unexcelled for naturalizing in woodland settings, where it can be counted upon to give quicker results than the native Azaleas.

COTONEASTER — C. lactea (parneyi) — vigorous semi-evergreen, large leaved shrub of spreading habit. In Southern New England it is at its best at Christmas time with clusters of bright red berries contrasting with the dark green foliage.

RHODODENDRON — Rh. fortunei the hardiest of the large leaved species of the fortunei series wintering well in Southern Massachusetts, fairly early blooming and starting to bloom when young. Plants obtain considerable size improving in flowering display year after year, large plants making an impressive showing with a profusion of blush or rosy lilac flowers. Flowers are seven lobed and of heavy substance, lasting considerably longer than those of ordinary Rhododendron. Plants require side shelter but do best with over-head exposure in full sun in these parts.

RHODODENDRON HYBRIDS

Considerable attention is being given to the creation of new hardy Hybrid Rhododendron varieties approaching the achievements of English breeders. Except in favored areas along the Pacific Coast we cannot expect to duplicate their results. Possibilities, however, exist in all areas where the hardy Catawbiense Hybrids can be grown for the introduction of new hybrid varieties which combine in their blood-lines the superior flowering qualities of many of the partially tender Asiatic species and the hardiness of the proven Catawbiense Hybrids. Foundation stocks of this type by American breeders are available to a limited extent, chiefly comprising combinations with — Decorum, Discolor, Fortunei, Haematodes. A wider range of possibilities is available to us thru the work of English breeders. Their best creations involve the blood-lines of the following species:

 ${\bf Arboreum,\,Auriculatum,\,Diaprepes,\,Discolor,\,Fortunei,\,Griersonianum,}$

The use of seed from these English hybrids offers the quickest approach to foundation stocks from which, by selection and cross-breeding, superb hardy American varieties can be developed.

Griffithianum, Haematodes, Eriogynum, Elliotti and others.

In all breeding work the achievement of excellence requires time and patience. Few of our modern breeders are favored by the sum of all conditions conducive to successful breeding work. The life effort of a single breeder may culminate in a number of good creations but possibly all of them depart from their work with the realization that the best is yet to come. It stands to reason that the spade work which breeders before us have done should be utilized to the fullest extent.

More stress should be laid on the creation of suitable foundation stocks to work with than on the achievement of prominence from the start. Many breeders in their frantic quest for glamour fail to realize that glamour is not readily reproduced from glamour and that outstanding plant material often is obtained from modest parent stock. Unknowingly, promising new plant material is often discarded by an obstinate regard for excellence which simply cannot be obtained in one generation while, with seed from this same material, the desired results may readily be had in the next. Points of excellence to be considered are:

- A Good constitution i.e. the physical appearance of a healthy plant with good foliage.
- B Hardiness.
- C-Flower characters as to color, substance, shape and size of trusses. A combination of excellence in all these points, the desired standard, is hard to achieve. Breeders will often have to content themselves if they have scored partly in the above points in first generation. Their reward will come if they continue to work with the foundation stocks thus achieved.

All accomplishments in plant breeding before our times, many long before laws of genetics were known, may have been achieved in this fashion. Classic proof are the many excellent Azalea, Camellia and Rose varieties produced in previous generations and centuries.

PINE LORE

With many growers confused as to what strains of Scotch Pine to plant we feel competent in giving the following suggestions:

Practically all strains are, for some condition or other, suitable both for forest planting, i.e., timber production and for the use as ornamentals or Christmas trees.

In general two major races of Scotch Pine concern us here:

Strains from Northern Europe growing on the sandy plains which stretch from the coast of Belgium and Holland all the way east to, and around, the shores of the Baltic Sea. They are considered good strains for reforestration, grow comparatively fast, but usually have the objectionable feature of foliage discoloration with the approach of cold weather. They all do best on deep, sandy soils. If planted on better soils plants have a tendency to "overeat," grow too fast and are prone to fall prey to disease and insect infestations.

Inquiries for seed of the Riga (East Baltic) strain of Scotch Pine are being received continually despite disappointing results growers of Christmas trees had for reasons of foliage discoloration in cold weather and slow growth of seedlings. With insufficient supplies from the East Baltic we have, in the past, recommended seed of **West Baltic strain**, i.e., seed from sources in Sweden, which judging from reports received from growers have given good results. For timber production in the north it seems to be equal to the Riga Pine and preferable where faster production is essential. Planted for Christmas trees no foliage discoloration was reported in Southern Pennsylvania, planted further north foliage may turn with approach of cold weather. For Christmas tree plantations on sandy soil we recommned it for trial.

The mountain strains from various origins in Europe usually growing on stony soils are better adapted for all around planting. It is from these strains that best results can be expected for use as Christmas trees. Grown on sandy soils plants from these strains require feeding to show best foliage color.

PINUS MONTANA—which is much planted on mountain slopes and steep banks to stop erosion, rock and snow slides, is of equal value for stopping wind erosion of dune lands in coastal districts. Closely planted it will form, in time, impenetrable thickets, a barrier to wind-blown sand, a refuge for wild life.

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